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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,941	12/09/2003	Koji Masuda	03500.017763	2709
5514	7590	06/14/2005		
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112				
			EXAMINER GLEITZ, RYAN M	
			ART UNIT 2852	PAPER NUMBER

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.P.

Office Action Summary	Application No.	Applicant(s)	
	10/729,941	MASUDA, KOJI	
	Examiner	Art Unit	
	Ryan Gleitz	2852	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/23/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 2h. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Shida (JP 2001-343825).

Shida discloses a developing apparatus including a developing container (31) for containing developer including toner and carrier (abstract, line 4), and developing an electrostatic image formed on an image bearing member (3). Screws (36, 37) together form a carrying member for carrying the developer in the developing container (31).

Opening which is not illustrated to the near side of drawing and a back side is prepared in the septum 44, the developer in the processing laboratory R1 conveyed with the screw 36 is transported into the churning room R2 through one opening of a septum 44, and the developer in the churning room R2 conveyed with the screw 37 is transported into a processing laboratory R1 through opening of another side of a septum 44. [0025]. This reads on a discharge port provided in the developing container for discharging any excess developer resulting from a supply of the developer.

A developer carrying capability of the carrying member is greater in an area near the discharge port, area M, than in an area downstream of the discharge port in a carrying direction of the developer. See abstract, lines 13-17.

Regarding claims 2 and 5, when the developer runs out completely it will inherently become lower at area M than at those points downstream, which still have a normal flow of developer. This is an example of when the developer carrying capability of the carrying member is set so that a level of the developer in the area near the discharge port *may* be lower than that in a contour portion of the carrying member and that a level of the developer in the area

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downstream of the discharge port in the carrying direction of the developer *may* be higher than a contour portion of the carrying member.

Regarding claims 3 and 6, a spiral wing portion provided on a rotary shaft. Churning plate (46) having width Y is used only in area N and is an agitating rib provided on the rotary shaft, and the agitating rib is not provided in the area near the discharge port, but is provided in the area downstream of the discharge port in the carrying direction of the developer.

Regarding claim 4, the developer carrying capability of the carrying member is greater in the area near the discharge port than in an area upstream, the area R1, in the carrying direction of the developer.

Regarding claim 7, figure 2 illustrates a developing chamber and an agitating chamber with a circulating route being constituted between the agitating chamber and the developing chamber.

Other Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Aimoto (JP 2001083802) disclose a developer carrying member with a higher carrying capability near a discharge port that downstream.

Mizuta (JP 060274030) disclose a developer carrying member in which the carrying capacity in an end region in the downstream side is higher than in an upstream side.

Sharpe (US 5,204,721) disclose a developing carrying member with a higher carrying capacity in the center and a lower carrying capacity on both sides.

Hattori et al. (US 5,682,584) disclose a mixing device with a screw having a larger center carrying capacity.

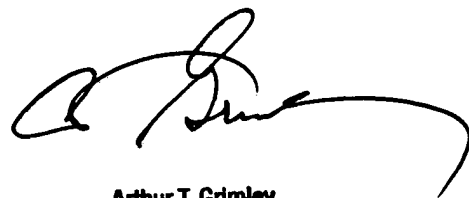
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Gleitz whose telephone number is (571) 272-2134. The examiner can normally be reached on Monday-Friday between 9:00AM and 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

rg



**Arthur T. Grimley
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